

What is claimed and desired to be secured by Letters Patent is as follows:

1. A load carrier arrangement adapted to be carried on a transporting vehicle, said load carrier arrangement comprising:

a hub coupled between a support member and a load carrying member;

said hub having a socket formed therein, said socket being substantially cylindrically-shaped and configured to receive a substantially cylindrically-shaped insert portion of said load carrying member therein;

said load carrying member having an insert portion and a load carrying portion with an angle interposed therebetween which fixes said insert portion and said load carrying portion in non-parallel orientation to one another; and

said insert portion of said load carrying member being twistably positioned in said socket thereby enabling twisting action therein which affects a transition between a load carrying orientation and a storable orientation.

2. A load carrier arrangement adapted to be carried on a transporting vehicle, said load carrier arrangement comprising:

a hub coupled between a support member and a load carrying member;

said hub having a socket formed therein, said socket being substantially cylindrically-shaped and configured to receive a substantially cylindrically-shaped insert portion of said load carrying member therein;

said load carrying member having an insert portion and a load carrying portion with an angle interposed therebetween which fixes said insert portion and said load carrying portion in non-parallel orientation to one another; and

said insert portion of said load carrying member being twistably positioned in said socket thereby enabling twisting action therein which affects a transition between a first load carrying orientation and a second load carrying orientation.

3. A load carrier arrangement adapted to be carried on a transporting vehicle, said load carrier arrangement comprising:

a hub coupled between a support member and a load carrying member;

said hub having a socket formed therein, said socket being substantially cylindrically-shaped and configured to receive a substantially cylindrically-shaped insert portion of said load carrying member therein;

said load carrying member having an insert portion and a load carrying portion with an angle interposed therebetween which fixes said insert portion and said load carrying portion in non-parallel orientation to one another; and

said insert portion of said load carrying member being twistably positioned in said socket thereby enabling twisting action therein which affects a transition between a load carrying orientation and a twist-adjusted orientation.

4. The load carrier arrangement as recited in claim 3 further comprising:

said angle interposed between said insert portion and said load carrying portion measuring approximately forty-five degrees so that a one-hundred and eighty degree twist of said insert portion in said socket causes said load carrying portion to transition between approximately perpendicular orientations.

5. The load carrier arrangement as recited in claim 3 further comprising:

said angle interposed between said insert portion and said load carrying portion measuring approximately forty-five degrees so that a less than ninety degree twist of said insert portion in said socket causes said load carrying portion to transition between two different load carrying orientations.

6. The load carrier arrangement as recited in claim 3 further comprising:

said load carrying member being constructed from substantially cylindrically-shaped tubing having a bend therein, said bend forming said angle that is interposed between said insert portion and said load carrying portion.

7. The load carrier arrangement as recited in claim 3 further comprising:

said support member being pivotally connected to said hub and configured for variable, but discreet operator positioning relative to said hub.

8. The load carrier arrangement as recited in claim 7 further comprising:

said support member being pivotally connected to said hub at a pivotation point and said hub further comprising a plurality of apertures arranged radially about said pivotation point for utilization by an operator in said variable, but discreet positioning of said support member relative to said hub.

9. The load carrier arrangement as recited in claim 8 further comprising:

said support member having at least one insert pin carried thereupon and adapted to be insertibly received in each of said plurality of apertures arranged radially about said pivotation point.

10. The load carrier arrangement as recited in claim 8 further comprising:

said support member having an insert pin carried thereupon and adapted to be insertibly received in each of said plurality of apertures arranged radially about said pivotation point, said insert pin having a projecting portion extending outside said support member and a root end coupled to a biasing member that is housed inside said support member and that urges said projection portion outwardly from said support member and into inserted engagement into any one of said plurality of apertures arranged radially about said pivotation point when properly aligned therewith.

11. The load carrier arrangement as recited in claim 10 further comprising:

said support member having a push pin carried thereupon, said push pin having a projecting portion extending outside said support member and a root end coupled to said biasing member that is housed inside said support member;

said push pin being positioned further away from said pivotation point than said insert pin on said support member and sufficiently far away from said pivotation point that said push pin is located beyond said hub; and

said push pin and said insert pin being arranged relative to one another on said biasing member so that depression of said push pin by an operator causes retraction of said insert pin from an engaging orientation with respect to said plurality of apertures.

12. The load carrier arrangement as recited in claim 11 further comprising:

said biasing member taking the form of a leaf-type spring housed within an interior space of said support member.

13. The load carrier arrangement as recited in claim 3 further comprising:

a cradle for a bicycle positioned on said load carrying member and adapted for cradling a bicycle frame on a base of said cradle, said base having a substantially upwardly open bicycle-engaging surface; and

a retaining strap at least partially extending upwardly from said base and positioned away from said base in an open configuration thereby permitting a bicycle to be inserted onto said bicycle-engaging surface in said open configuration, said retaining strap being sufficiently flexible to be bent across said bicycle-engaging surface to retain a bicycle frame thereon, said strap including a fastener for fastening said retaining strap in a bicycle frame-retaining configuration.

14. The load carrier arrangement as recited in claim 3 further comprising:

a cradle for a bicycle positioned on said load carrying member, said cradle configured to be mounted on a substantially cylindrically shaped part of said load carrying portion of said load carrying member and said cradle being further configured to cradle a substantially round-shaped bicycle frame member on a base of said cradle, said base having a substantially upwardly open bicycle-engaging surface adapted to engage a substantially round-shaped bicycle frame member; and

a retaining strap at least partially extending upwardly from said base and positioned away from said base sufficiently to establish an open configuration thereby permitting a bicycle frame member to be placed upon said bicycle-engaging surface in said open configuration, said retaining strap being sufficiently flexible to be bent across said bicycle-engaging surface to retain a bicycle frame thereon, said strap including a fastener for fastening said retaining strap in a bicycle frame-retaining configuration.

15. The load carrier arrangement as recited in claim 14 wherein said base includes a round-shaped through-hole into which said substantially cylindrically shaped part of said load carrying portion of said load carrying member is extendable, said round-shaped through-hole being adapted for a snug frictional fit between said base and said load carrying member so that said base is slidable along said load carrying member and is restrainable in a position upon said load carrying member by said friction fit.

16. The load carrier arrangement as recited in claim 14 wherein said restraining strap further comprises a series of apertures located along a length thereof, each of said apertures being substantially rectangular in shape.

17. The load carrier arrangement as recited in claim 3 further comprising:
said insert portion of said load carrying member having a first aperture therein;
said hub having a locking pin, said first aperture and said locking pin arranged for alignment with one another for locking engagement in said load carrying orientation.

18. The load carrier arrangement as recited in claim 17 further comprising:
said insert portion of said load carrying member having a second aperture therein;
said second aperture and said locking pin arranged for alignment with one another for locking engagement in a storable orientation of said load carrier arrangement.

19. The load carrier arrangement as recited in claim 18 further comprising:
said first and said second apertures being opposingly arranged one to the other on said load carrying member.

20. The load carrier arrangement as recited in claim 18 further comprising:
said first and said second apertures being arranged at one hundred and eighty degrees to one another on said load carrying member.

21. A holder for a bicycle adapted to be mounted on a bicycle carrier, said holder comprising:
a cradle arranged to be mounted on a portion of a bicycle carrier support arm and said cradle being adapted for cradling a bicycle frame on a base of said cradle, said base having a substantially upwardly open bicycle-engaging surface; and

a retaining strap at least partially extending upwardly from said base and positioned away from said base in an open configuration thereby permitting a bicycle to be inserted onto said bicycle-engaging surface in said open configuration, said retaining strap being sufficiently flexible to be bent across said bicycle-engaging surface to retain a bicycle frame thereon, said strap including a fastener for fastening said retaining strap in a bicycle frame-retaining configuration.

22. A holder for a substantially round-shaped bicycle frame member that is configured to be mounted on a bicycle carrier, said holder comprising:

a cradle configured to be mounted on a substantially round-shaped bicycle carrier support arm and said cradle being further configured to cradle a substantially round-shaped bicycle frame member on a base of said cradle, said base having a substantially upwardly open bicycle-engaging surface adapted to engage a substantially round-shaped bicycle frame member; and

a retaining strap at least partially extending upwardly from said base and positioned away from said base sufficiently to establish an open configuration thereby permitting a bicycle frame member to be placed upon said bicycle-engaging surface in said open configuration, said retaining strap being sufficiently flexible to be bent across said bicycle-engaging surface to retain a bicycle frame thereon, said strap including a fastener for fastening said retaining strap in a bicycle frame-retaining configuration.

23. The invention as recited in claim 22 wherein said base includes a round-shaped through-hole through which a round-shaped bicycle carrier support arm is extendable, said round-shaped through-hole being adapted for a snug frictional fit between said base and such a support arm so that said base is slidable along the support arm and is restrainable in a position upon the support arm by the friction fit.

24. The invention as recited in claim 22 wherein said restraining strap further comprises a series of apertures located along a length thereof, each of said apertures being substantially rectangular in shape.

25. A bicycle carrier adapted to be mounted on a vehicle comprising:

- a mounting frame securable to a vehicle;
- a pair of bicycle support arms projecting from said mounting frame; and
- at least one cradle mounted on at least one of said support arms for cradling a bicycle frame, said at least one cradle having portions comprised of a flexible material and including a base mounted on a respective support arm, and a retaining strap, said base forming a bicycle-engaging surface and including first fastening means, said strap being of one-piece construction with said base and at least a portion of said strap normally extending upwardly from said base to permit a bicycle to be inserted onto said bicycle-engaging surface, said strap being flexible to be bent across said bicycle-engaging surface to retain a bicycle frame thereon, said strap including second fastening means engageable with said first fastening means for fastening said strap in its bicycle frame-retaining position.

26. The invention as recited in claim 25 wherein said base further comprises:

a round-shaped through-hole through which a round-shaped support arm extends, said base being slidable along said support arm.

upon the base of the support arm, the support arm is slidable along the support arm.